CLAIMS

1. In a method of isolating osteogenic protein from bone, in which an osteogenic protein containing fraction is extracted from bone and enriched by a sequence of enrichment steps selected from ultrafiltration and chromatography, the improvement of removing higher molecular weight components from the osteogenic protein containing fraction prior to the enrichment steps.

2. The improvement as claimed in Claim 1, in which the higher molecular weight components have a molecular weight of about 100 - 300 kDa.

3. The improvement as claimed in Claim 1 or Claim 2, in which the higher molecular weight components are selected from collagen, collagen fragments, collagen aggregates and mixtures thereof.

4. The improvement as claimed in Claim 1 or Claim 2, in which the higher molecular weight components are removed by ultrafiltration.

5. The improvement as claimed in Claim 3, in which the higher molecular weight components are removed by ultra-filtration through a 100 - 300 kDa nominal molecular weight polysulphone membrane.

6. The improvement as claimed in any one of Claims 8 to 10 inclusive, in which the osteogenic protein containing fraction is concentrated and desalted through successive ultra-filtration steps.

7. A bone growth inducing composition which includes osteogenic protein, insoluble bone matrix (ICBM) and gelatin.

8. A bone growth inducing composition as claimed in Claim 7, in which the osteogenic protein is prepared by an improved method as described in any one of Claims 1 to 6 inclusive.

9. A bone growth inducing composition as claimed in Claim 8, which is in the form of a hydratable powder.

10. A bone growth inducing composition as claimed in any one of Claims 7 to 9 inclusive, in which the mass ratio between the osteogenic protein, the hICBM and the gelatine is 0,4 – 0,6 : 800 – 1200 : 100 - 1000.

11. A method of preparing a bone growth inducing composition, the method including the steps of combining osteogenic protein, insoluble bone matrix and gelatin.

12. A method as claimed in Claim 11, in which the osteogenic protein is prepared by an improved method as described in any one of Claims 1 to 6 inclusive.

13. A device for inducing bone growth in a mammal, the device including a bone growth inducing composition which comprises osteogenic protein, insoluble bone matrix and gelatin and a delivery mechanism for delivery of the composition to a treatment site.

14. A device as claimed in Claim 13, in which the osteogenic protein is obtained by an improved method as described in any one of Claims 1 to 6.

15. A device as claimed in Claim 13 or Claim 14, in which the delivery mechanism is a syringe.

16. A device as claimed in any one of Claims 13 to 15 inclusive, in which the composition is a hydratable powder.